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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,317	10/01/2003	Min Liu	MS1-1630US	6512

69316 7590 06/06/2007
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EXAMINER

CASCHERA, ANTONIO A

ART UNIT	PAPER NUMBER
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2628

MAIL DATE	DELIVERY MODE
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06/06/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/676,317	Applicant(s) LIU ET AL.	
	Examiner Antonio A. Caschera	Art Unit 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-35, 38 and 39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 30-35, 38 and 39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/23/07 & 05/30/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 30-35, 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turpin et al. (U.S. Patent Publication Number: 2003/0174882), Beretta (U.S. Statutory Invention Registration Number: H1506) and further in view of Piatt et al. (U.S. Patent 6,944,334).

In regards to claim 30, Turpin et al. discloses a computer-accessible medium having one or more instructions that are executable by one or more processors (§§ 0073-0074; Figure 2), the one or more instructions causing the one or more processors to:

- detect a color selected from a graphic user interface (GUI) color palette associated with an authoring environment (Figure 13; § 0117-0119 discloses a selectable color palette);
- convert the component values to corresponding component values in a standardized reference color coordinate system (§ 0126-127; in addition, it is very common in the art to convert from one color space to a device independent color space before converting to a third color space); and
- convert the component values in the standardized reference color coordinate system to corresponding component values in a receiver color coordinate system (§ 0064).

While Turpin et al. discloses the selection and conversion of the color space data, as well as one form of normalization of the color space data, Turpin et al. does not specifically disclose wherein the instructions cause the processor to normalize component values of the selected color in accordance with a number of bits-per-channel-associated with the authoring environment.

Beretta discloses wherein the instructions cause the processor to normalize component values of the selected color in accordance with a number of bits-per-channel-associated with the authoring environment (col. 34, lines 38-59). Note, Berretta explicitly discloses dividing RGB values by 255 which the Office interprets functionally equivalent to the normalizing of Applicant's claim especially with regards to Applicant's reference to the specification in Applicant's Remarks (see pages 8-9, equations and arguments on bottom of page 8 of Applicant's Remarks). It would have been obvious to one skilled in the art at the time the invention was made to implement the color processing techniques of Turpin et al. with the GUI color palette techniques of Beretta in order to create a more effective color selection and editing user interface by creating uniformity between a user's interpretation of color and a color space (see column 1, lines 57-65 of Beretta). Neither Turpin et al. nor Beretta explicitly disclose indicating whether the selected color is valid, and if it is not valid, requesting that another color be selected by the user from the GUI. Piatt et al.

discloses a method of indicating whether converted color values in a target space are valid for a display device, i.e. whether a specified color is in or out of the device color gamut (see column 5, lines 37-60 and Figure 5 under "Results" frame of data). Piatt et al. also discloses the method indicating a closest in gamut color match for the specified color and instructs the user on how to select such a color (see Figure 5, under "Results"). Note, the Office interprets that such instructions are functionally equivalent to Applicant's claim limitation of requesting that another

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color be selected from the color palette since if the user desires such a specified color, the user must select the closest matched color, as indicated in the invention of Piatt et al. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the user notifications and color validating of Piatt et al. with the color processing techniques of Turpin et al. and GUI color palette techniques of Beretta in order to provide feedback to the user of the color system, the status of selected colors compared to color palettes (see column 5, lines 42-47 of Piatt et al.) thereby making the system more intuitive in regards to errors and input validation. Although Piatt et al. discloses validating colors comprised within the CMYK and L*a*b* color spaces (see column 5, lines 37-60 and Figure 5), thereby inherently testing/indicating “printer safe” colors (as per the CMYK colors), Piatt et al. does not explicitly disclose indicating whether the specified color is “television safe.” At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement the indication and validation techniques of Piatt et al. utilizing a number of different color spaces, including “television safe” color spaces i.e. YUV, YIQ, YcrCb. Applicant has not disclosed that specifically implementing the invention towards televisions instead to, say printers as in Piatt et al., provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant’s invention to perform equally well with the indication and validation techniques of Piatt et al. because Piatt et al. performs as what is described in the claim except for indicating “printer safe” instead of “television safe” color data. The difference of utilizing “television safe” color data as opposed to “printer safe” color data is a matter decided upon by the inventor and to which best suits the

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applied application. Therefore, it would have been obvious to one of ordinary skill in this art to modify Piatt et al. with Turpin et al. and Beretta, to obtain the invention as specified in claim 3. The Office interprets that it would have been obvious to one of ordinary skill in the art at the time the invention was made to

In regards to claim 31, Turpin et al., Beretta and Piatt et al. disclose all of the limitations as applied to claim 30 above. In addition, Turpin et al. discloses wherein the GUI color palette depicts a plane of a multi-dimensional color space predicated upon a dominant color selection such that for each color depicted in the GUI color palette, a component value associated with the dominant color is static and each dimension represents an available range of another color component (§ 0105 where the color selected for processing is the dominant color).

In regards to claim 32, Turpin et al., Beretta and Piatt et al. disclose all of the limitations as applied to claim 30 above. In addition, Turpin et al. discloses wherein the GUI color palette depicts a rotatable 3-D rendering of 1an X-dimensional ($X \geq 6$) color space predicated upon a dominant color selection such that for each color depicted in the GUI color palette, a component value associated with the dominant color is static and each dimension represents an available range of another color component (§§ 0103-0104 discloses rotation).

In regards to claim 33, Turpin et al., Beretta and Piatt et al. disclose all of the limitations as applied to claim 30 above. In addition, the combination discloses wherein to normalize the component values of the detected color is to gamma-correct the component values (Beretta: Figure 20, Item 218; col. 34:7-14).

In regards to claim 34, Turpin et al., Beretta and Piatt et al. disclose all of the limitations as applied to claim 30 above. In addition, the combination discloses wherein to convert the

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component values in the standardized reference color coordinate system to corresponding component values in the receiver color coordinate system further is to gamma correct the converted component values in the standardized reference color coordinate system (Beretta: Figure 20, item 218; col. 34:7-14).

In regards to claim 35 Turpin et al., Beretta and Piatt et al. disclose all of the limitations as applied to claim 30 above. In addition, the combination discloses wherein the one or more instructions using the one or more processors to convert the component values in the standardized reference color coordinate system further causes the one or more processors to calculate a minimum average component value if one of the converted component values exceed a range of [0,1] (Beretta: Figure 1, Item 22; col. 41:16-33).

In regards to claim 38 Turpin et al., Beretta and Piatt et al. disclose all of the limitations as applied to claim 30 above. In addition, the combination discloses further comprising one or more instructions causing the one or more processors to select another color from the GUI color palette if one of the converted component values exceed a range of [0,1] (Beretta: col. 41:16-33). Also, Piatt et al. also discloses the method indicating a closest in gamut color match for the specified color and instructs the user on how to select such a color (see Figure 5, under "Results").

In regards to claim 39, Turpin et al., Beretta and Piatt et al. disclose all of the limitations as applied to claim 30 above. In addition, Turpin et al. discloses wherein the standardized reference color coordinate system is a CIE XYZ system (§ 0233).

Response to Arguments

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2. Applicant's arguments, see pages 6-7 of Applicant's Remarks, filed 03/23/07, with respect to the rejection(s) of claim(s) claims 30-35, 38 and 39 under 35 USC 103(a), in view of Turpin et al., Beretta and EasyRGB, have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Turpin et al., Beretta and Piatt et al..

References Cited

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- a. White (U.S. Patent 6,466,274 B1)
 - White discloses a system and software that translates a source palette containing TV unsafe colors into a resultant modified palette containing only TV safe colors.
- b. Braudaway et al. (U.S. Patent 5,502,458)
 - Braudaway et al. discloses a method and apparatus for creating and displaying device independent images using display specific palettes.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Antonio Caschera whose telephone number is (571) 272-7781. The examiner can normally be reached Monday-Thursday and alternate Fridays between 7:00 AM and 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung, can be reached at (571) 272-7794.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks


Washington, D.C. 20231

or faxed to:

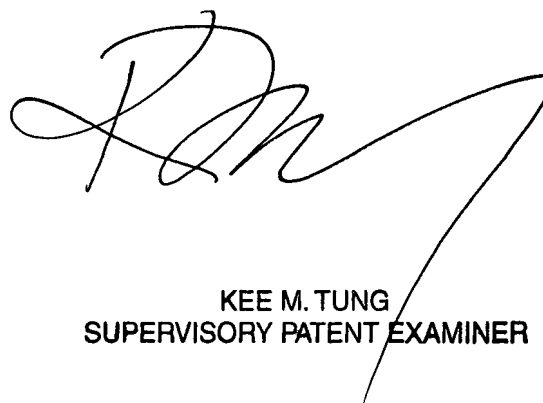
571-273-8300 (Central Fax)

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (571) 272-2600.

aac

6/1/07

Antonio Caschera
Patent Examiner


KEE M. TUNG
SUPERVISORY PATENT EXAMINER